

## **Positive Voltage Regulators**

#### **General Description**

The XC62G series are highly precise, low power consumption, positive voltage regulators, manufactured using CMOS and laser trimming technologies. The series achieves high output currents with low input-output voltage differentials, and consists of a high precision voltage reference, an error correction circuit, and an output driver with current limitation.

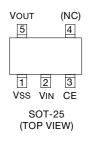
With good transient responses, output remains stable even during load changes. Also, having high ripple rejection ratios, the series can be used with low power supply noise.

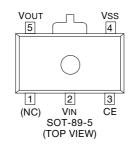
The CE input enables the output to be turned off, resulting in reduced power consumption.

SOT-25 (150mW) and SOT-89-5 (500mW) packages are available.

With regards to the CE function, as well as the positive logic XC62GR series, a negative logic XC62GP series (custom) is also available.

# Pin Configuration





### **Features**

**Maximum Output Current: 150mA** 

(within Maximum power dissipation, Vout=3.0V) **Output Voltage Range:** 2.1V to 5.0V in 0.1V increments

**Highly Accurate:** Setup voltage ± 2%

( ± 1% for semi-custom products )

Low power consumption:

TYP  $13\mu$ A [Vout=3.0V],

TYP  $23\mu$ A [Vout=3.0V semi-custom, high-speed versions],

TYP  $0.1 \mu A$  [ Stand-by mode ]

Output voltage temperature characteristics: TYP± 100ppm/°C

Line regulation: TYP 0.2%/V

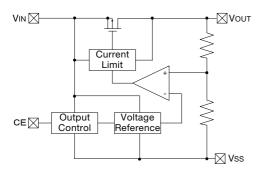
Ultra small package: SOT-25 (150mW) mini-mold

: SOT-89-5 (500mW) power-mini-mold

#### **Pin Assignment**

PIN NUMBER		PIN	FUNCTION
SOT-25	SOT-89-5	NAME	FUNCTION
1	4	Vss	Ground
2	2	VIN	Supply Voltage Input
3	3	CE	Chip Enable
4	1	(NC)	No Connection
5	5	Vout	Regulated Output Voltage

## **Block Diagram**



#### **Ordering Information**

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a b cdef

DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
True Logic Level at CE Pin:  a R = Positive P = Negative ( Custom )		e	Package Type M = SOT-25 P = SOT-89-5
b	Output Voltage:  50 = 3.0V  50 = 5.0V		
С	Response : 1 = Standard 2 = High Speed ( Semi-Custom )	f	Device Orientation : R = EmbossedTape ( Right )
d	Output Voltage Accuracy : $1 = \pm 1.0\%$ ( Semi-Custom ) $2 = \pm 2.0\%$		L = Embossed Tape ( Left )